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NEXT PHASE: Sam Leighton (left) and Bombora co-founder Shawn Ryan at Como jetty with a trial unit.



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Private Perth company [Bombora Wave Power](#) is seeking to raise \$8 million for the first commercial deployment of its innovative technology.

After nearly 10 years of research and product development, [Bombora Wave Power](#) has completed a detailed feasibility study for a commercial-scale wave farm.

Chief executive [Sam Leighton](#) said the study enabled Bombora to finalise the design of its mWave converters, and established its ability to compete with other renewable energy sources in Europe.

"We will match the cost of electricity from offshore wind farms and solar arrays by 2023," [Mr Leighton](#) told *Business News*.

Bombora's mWave units will sit on the ocean floor at a depth of 10 metres, in contrast to the buoys used by companies such as [Carnegie Wave Energy](#) and [Protean Wave Energy](#).

Comprising a 60-metre long concrete base and a flexible rubber membrane that pumps air through a turbine, each unit will cost \$4.75 million to manufacture.

Bombora's first commercial project will be a 60-megawatt wave farm in Peniche, Portugal, where it aims to deploy 40 mWave units about 700 metres offshore along a 2.5 kilometre stretch of coast.

[Mr Leighton](#) said the company was seeking to raise \$8 million from private investors to fund construction and installation of the first 1.5MW mWave converter early next year.

He expects this will confirm the mWave's power output and storm survival, while assessing environmental impact.

The capital raising is a large step for Bombora, which has spent just \$2 million to date.

[Mr Leighton](#) said the raising could be undertaken in stages, with an initial \$1 million needed to fund construction of the first 'cell' for the converter.

The feasibility study used industry experts and local Portuguese suppliers to ensure technical viability and costing accuracy.

It followed tank testing in 2014 and open-water testing in the Swan River at Como in 2015.

One of the key aspects of the study was a 'levelised cost of energy' projection, which factored in capital costs, operating costs and power output for different types of renewable energy.

This projection, which assumed wave power would achieve the same efficiency gains as wind power over time, concluded wave power would be competitive with other renewables by 2023.

Unlike Carnegie and Protean, Bombora has no plans for an [ASX](#) listing.

"We're a private company and we're hoping to stay that way for as long as possible," [Mr Leighton](#) said.

He expects the company's long-term future rests with either a technology licensing deal or a trade sale to a bigger company in the industry.